

THE ELAPHIDIONINE SUBGENUS *PROTANEFPLUS*

(COLEOPTERA: CERAMBYCIDAE)

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Protanefplus Linsley (1934), originally proposed as a monobasic genus based on the very narrow metathoracic episterna, the finely, densely pubescent body, and twelve-segmented antennae of the male, has been treated recently as a subgenus of *Aneflus* (Linsley, 1961; Chemsak and Linsley, 1963). In the interval since the taxon was first characterized, five species have been added and a sixth is here described—making a total of seven currently named species.

As now known, the subgenera *Aneflus* s. str. and *Protanefplus* are largely allopatric. *Aneflus*, containing 17 described species, is essentially a Mexican group, the species occurring in the area from southwestern United States to Chiapas and Yucatan. *Protanefplus* is primarily confined to Central America, in the region from Panamá to Guatemala, but extends northward into Mexico at least as far as San Luis Potosí.

***Aneflus* (*Protanefplus*) Linsley**

Protanefplus Linsley, 1934, *Psyche* 41: 233.

Aneflus (*Protanefplus*), Linsley, 1961, *Pan-Pacific Ent.* 37: 169; Chemsak and Linsley, 1963, *Bull. Brooklyn Ent. Soc.* 58: 80.

This subgenus may be characterized by the fine, uniform, dense pubescence, twelve-segmented antennae of the males, and narrow metathoracic episterna. The front coxal cavities are open in all known species and the pronotal disk is shallowly, transversely rugulose without dorsal calluses.

Type species. *Protanefplus pubescens* Linsley (monobasic).

The following key will separate the species known to us:

KEY TO SPECIES OF *PROTANEFPLUS*

1. Antennae with third and fourth segments subequal in length, or third only slightly longer than fourth; head not asperately punctate 2
- Antennae with third antennal segment twice as long as fourth; head grossly asperate punctate. Length, 30 mm. Veracruz ***cylindricollis***
- 2(1). Antennae with scape longer than, or subequal to third segment 3
- Antennae with scape shorter than third segment, third segment $1\frac{1}{4}$ times as long as fourth; color dark brown, antennae almost black, pubescence dense, grayish white. Length, 30 mm. El Salvador ***zilehi***

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- 3(2). Pubescence very short, fine, grayish to golden, not obscuring surface nor distinctly interrupted by rows of round denuded spots each enclosing a coarse puncture bearing an erect seta 4
 Pubescence dense, coarse, long, grayish, obscuring surface, interrupted by rows of round denuded spots each enclosing a coarse puncture bearing an erect seta; surface of pronotum obscured. Length, 24-32 mm. Mexico **glabropunctatus**
- 4(3). Antennae with third segment longer than, or subequal in length to fourth 5
 Antennae with third segment shorter than fourth segment; elytral pubescence very fine, dense, short, interrupted irregularly by round denuded spots each enclosing a coarse puncture bearing an erect seta; twelfth segment of male only slightly shorter than eleventh. Length, 25-30 mm. Veracruz to Honduras **pubescens**
- 5(4). Antennae with segments densely clothed with very fine, minute, appressed pubescence, surface not obscured, elytral pubescence uniformly fine 6
 Antennae with segments densely clothed with fairly long, coarse, depressed, white pubescence which obscures the surface; elytral pubescence consisting of dense patches of fine appressed yellowish white pubescence on surface around coarse punctures which bear coarse, recurved, white hairs. Length, 29-33 mm. Costa Rica **pilosicornis**
- 6(5). Elytra pale brown to dark brown, punctures behind basal one-fourth smaller and more separated than circumscutellar punctures; fine pubescence yellowish white to golden; appendages usually brownish. Length, 21-30 mm. Mexico to Panamá **minutivestis**
 Elytra reddish brown, punctures behind basal one-fourth confluent, as coarse as circumscutellar punctures; appendages almost piceous; pubescence white, pale yellowish on head. Length, 25-31 mm. El Salvador to Costa Rica **planus**

Aneflus (Protaneflus) cylindricollis Bates

Aneflus cylindricollis Bates, 1892, Trans. Ent. Soc., London 1892: 148, pl. 5, fig. 2; Linsley, 1936, Ann. Ent. Soc. Amer. 9: 471.

Aneflomorpha cylindricollis, Casey, 1912, Memoirs on the Coleoptera 3: 293.

Aneflus (Protaneflus) cylindricollis, Chemsak and Linsley, 1963, Bull. Brooklyn Ent. Soc. 58: 84.

We have not studied the type species but, judging from the original description, it is distinctive by having the third antennal segment twice as long as the fourth and the gross asperate punctures of the head.

Type locality. Jalapa, Veracruz.

Aneflus (Protaneflus) zilchi Franz

Aneflus zilchi Franz, 1954, Senckenbergiana 34: 218; pl. 1, fig. 2.

A dark brown, densely white pubescent species characterized by having the antennal scape shorter than the third segment and the third longer than the fourth.

Type locality. Dept San Vicente: Finca El Carmen, 1,300 m. Vulkan San Vicente, El Salvador.

***Aneflus (Protaneflus) glabropunctatus* Chemsak and Linsley**

Aneflus (Protaneflus) glabropunctatus Chemsak and Linsley, 1963, Bull. Brooklyn Ent. Soc. 58: 84, pl. 1.

This species differs from others in the subgenus by the much denser pubescence which is interrupted by round denuded elytral spots each enclosing a coarse puncture bearing a coarse, erect seta.

Type locality. Pisté, Yucatan, Mexico.

***Aneflus (Protaneflus) pubescens* Linsley**

Protaneflus pubescens Linsley, 1934, Psyche 41: 233.

Aneflus (Protaneflus) pubescens, Linsley, 1961, Pan-Pacific Ent. 37: 169; Chemsak and Linsley, 1963, Bull. Brooklyn Ent. Soc. 58: 86.

Color pale brown to pale reddish brown with darker head, prothorax, and appendages. The elytral costae are feeble and the fine pubescence is very short, recumbent, and uniform with round denuded spots irregularly interspersed. The twelfth antennal segment of the males is only slightly shorter than the eleventh.

Type locality. Punta Gorda, British Honduras.

Additional records. 1 ♂, Allen Point, Ascension Bay, Quintana Roo, Mexico, IV-17-60 (J. F. G. Clarke); 3 ♂♂, Cayuga, Guatemala, V-15 (W. Schauss); 1 ♂, La Ceiba, Honduras, V-17-16 (F. J. Dyer).

***Aneflus (Protaneflus) pilosicornis*, new species**

Female.—Form elongate, cylindrical, slightly tapering; elytra reddish brown, remainder of body darker; pubescence yellowish and white, that of elytra consisting of dense patches of fine, appressed, yellowish white pubescence on surface around coarse punctures which bear coarse, recurved, white hairs. Head rather finely, shallowly, confluent punctate on vertex except for median glabrous area; pubescence yellowish white, fairly long, appressed, moderately dense, erect hairs almost absent; antennae eleven-segmented, extending to about mid-elytra, distinctly tapering apically, scape confluent punctate, moderately clothed with fine, depressed, white hairs, segments two to six densely clothed with long, depressed, coarse, white pubescence, segments from seventh densely clothed with short, white, appressed hairs, long suberect hairs abundant on basal segments, scape longer than third segment, third longer than fourth, segments five to ten subequal, eleventh longest, segments three to eight spined at apices. Pronotum longer than broad, cylindrical, sides subparallel, apex with a narrow, glabrous, impressed margin, base slightly constricted; disk convex, coarsely, shallowly, transversely rugose, punctures vague; pubescence moderately dense, yellow white and depressed and white and suberect; prosternum impressed, coarsely punctate and rugose, pubescence dense, yellowish white and depressed and white and suberect; metasternum coarsely, rugosely punctate, more finely toward edges, pubescence at edges very dense, coarse, appressed; scutellum densely clothed with recumbent yellow white pubescence.

Elytra more than three times as long as broad, slightly tapering apically; basal punctures coarse, irregular, somewhat rugose, confluent; pubescence on surface around punctures yellowish, minute, appressed, each puncture bearing a coarse, white, recurved or suberect hair; apices bispinose. Legs slender; femora moderately coarsely, densely punctate, moderately densely pubescent. Abdomen sparsely punctate; pubescence yellowish, appressed, white and depressed and yellowish white and suberect; apex of last sternite rounded. Length, 29–33 mm.

Holotype female (United States National Museum) from San José, Costa Rica, III-23 (F. Nevermann); one female paratype from Costa Rica (F. Nevermann, E. Gongora).

This species presumably resembles *A. (P.) zilchi* Franz, judging from the illustration of that species (1954). Both have the basal antennal segments densely clothed with coarse depressed pubescence. However, *pilosicornis* has the antennal scape longer than the third segment.

***Aneflus (Protaneflus) minutivestis* Chemsak and Linsley**

Aneflus (Protaneflus) minutivestitus Chemsak and Linsley, 1963, Bull. Brooklyn Ent. Soc. 58: 85, pl. 1.

This species varies in ground color from pale brownish to pale reddish brown with darker appendages. The twelfth antennal segment of the males is one-half as long as the eleventh, or slightly less. The pubescence is fine, uniform, varying from whitish to yellowish.

Apparently the species ranges from the state of San Luis Potosí in Mexico to Panamá. Specimens are at hand from El Salvador and Barro Colorado, Canal Zone, each locality possibly representing a distinct subspecies. However, the lack of definitive series and gaps in distributional records makes subspecific assignments undesirable at this time. The following material is tentatively designated as representing *A. (P.) minutivestis*.

1 ♀, Senahu, Guatemala, XI-14-34 (F. Münchmeyer); 1 ♂, 1 ♀, El Salvador (A. Martínez Cuestas); 1 ♂, San José, Costa Rica (F. Nevermann, E. Gongora); 1 ♀, La Lola, Costa Rica, III-9-58 (M. J. Stelzer); 1 ♂, 2 ♀ ♀, Barro Colorado, Canal Zone, I-35 (M. Bates); 2 ♀ ♀, Barro Colorado, XII-25-40, I-2-41 (K. W. Cooper); 1 ♀, Barro Colorado, V-41 (J. Zetek); 1 ♂, Barro Colorado, III-6-56 (C. W. and M. E. Rettenmeyer); 1 ♀, Barro Colorado, III-30-40 (G. C. Wood).

***Aneflus (Protaneflus) planus* Franz**

Aneflus protensus planus Franz, 1954, Senckenbergiana 34: 219, pl. 1, fig. 3.

The coarse confluent punctures covering at least the basal half of the elytra, the reddish brown ground color and piceous appendages, and white pubescence will distinguish this species.

Type locality. Dept. San Salvador: San Salvador.

Additional records. 1 ♂, Turrialba, Costa Rica, VI-9-62 (H. Ruckes);

1 ♀, "Hamburgfarm, Reventazon, Ebene Limon," Costa Rica, VII-1-29 (F. Nevermann).

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DISTRIBUTION AND HOST PLANTS OF OLIGONYCHUS PRATENSIS (BANKS)

(ACARINA: TETRANYCHIDAE)

During the 1930's the senior author became interested in a mite then called *Paratetranychus simplex* Banks. More recently Pritchard and Baker, in revising the Tetranychidae, assigned to this mite the name *Oligonychus pratensis* (Banks). For years it had been known as the "date mite", since it occurred in the date gardens of the Coachella Valley of California. In a survey by Dr. Fenner Stickney¹ and the senior author, collections of this mite were made. With only one exception, all mites of the above species were found on plants of the botanical class Monocotyledonae. Such selectiveness is rather rare among mites in the family Tetranychidae. Following is a listing of the host plants and the states from which *O. pratensis* was collected, including a few records by Pritchard and Baker (A Revision of the Mite Family Tetranychidae, Mem. Ser. Vol. 2, San Francisco, 1955).

Washington: Wheat (*Triticum aestivum*), 3 records; timothy grass² (*Phleum pratense*), 1 record; a grass, 1 record; Oregon: wheat (*Triticum* sp.), 1 record; Nevada: *Agropyron intermedium*, 1 record; Utah: aspen (*Populus tremuloides*), 1 record; field corn (*Zea maize*), 1 record; New Mexico: wheat, 1 record; Kansas: wheat, 1 record; Louisiana: a grass (*Panicum* sp.), 2 records; Florida: sugar cane (*Saccharum officinarum*), 2 records; para grass, 1 record; Texas: grasses, 2 records; California: Bermuda grass (*Cynodon dactylon*), 14 records; ryegrass (*Elymus* sp.), 1 record; a grass (*Echinochloa colonum*), 2 records; a grass (*Eragrostis cilianensis*), 1 record; a grass (*Chloria virgata*), 1 record; a grass (*Bouteloua barbata*), 1 record; a grass (*Sporobolus cryptandrus*), 1 record; a grass (*Conchrus pauciflorus*), 1 record; a grass (*Setaria viridis*), 1 record; a grass (*Digitaria sanguinalis*), 1 record; a reed (*Arundo donax*), 1 record; date palm (*Phoenix dactylifera*), 2 records; Canary Island palm (*Phoenix canariensis*), 2 records; fan palm (*Washingtonia filifera*), 1 record.—E. A. MCGREGOR and FENNER STICKNEY.

¹ Deceased.

² Types from this host and locality.